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(19) **United States**(12) **Patent Application Publication****Liu et al.**(10) **Pub. No.: US 2014/0241307 A1**(43) **Pub. Date: Aug. 28, 2014**(54) **METHOD FOR ALLOCATING A
TRANSMISSION MODE TO A USER
EQUIPMENT AND APPARATUS THEREOF**(52) **U.S. Cl.**
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H04L 5/00 (2006.01)(57) **ABSTRACT**

It is described a method for allocating a transmission mode to a user equipment for a radio transmission within a cellular network between the user equipment and a base station, wherein the user equipment is adapted to communicate with the base station in the allocated transmission mode via a communication channel. The method includes determining, by the base station, an information being indicative for a quality of the communication channel, receiving, by the base station, a feedback information from the user equipment being indicative for the quality of the communication channel, determining a compensation value based on the information and the feedback information, wherein the compensation value is adapted for compensating a difference between the information and the feedback information, determining an adapted transmission mode for the user equipment based on the compensation value, and allocating the adapted transmission mode to the user equipment.

